The Archaeology of Anatolia

Volume II

Recent Discoveries (2015-2016)

Edited by Sharon R. Steadman
and Gregory McMahon

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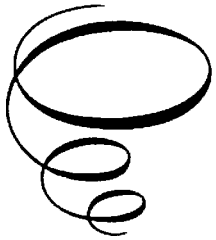

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CHAPTER FIFTEEN

LIVING ON THE MARGINS: FIRST RESULTS FROM THE DEREKÖY ARCHAEOLOGICAL SURVEY OF THE SAGALASSOS PROJECT IN THE WESTERN TAURUS MOUNTAINS

RALF VANDAM, PATRICK T. WILLETT, AND JEROEN POBLOME

INTRODUCTION

The Sagalassos Archaeological Research Project has a long history of archaeological survey research that aims to contribute to the project's broad mission to document the long-term development of socio-ecological systems in the study region of ancient Sagalassos (SW Turkey, Burdur province, Fig. 15-1). This area, which corresponds to the administrative territory of Roman imperial Sagalassos, was extensively surveyed from 1993–1998, resulting in the documentation of a wide variety of archaeological sites (over 250) from various time periods (Vanhaverbeke and Waelkens 2003; Waelkens et al. 1997, 2000). This research has since functioned as the basis for subsequent, more intensive archaeological survey campaigns. Initially these intensive survey efforts focused on the suburban regions of the ancient city of Sagalassos (Martens et al. 2008; Vanhaverbeke et al. 2009). From 2008 onwards, a new series of intensive survey campaigns were undertaken on the more peripheral valley systems in our study region (Fig. 15-1), such as the Bereket Valley (Kaptijn et al. 2013; Vanhaverbeke et al. 2011) and more recently the Burdur Plain (Kaptijn et al. 2012; Vandam et al. 2013; Vandam 2015; Vandam and Kaptijn 2015). By comparing the occupational history of these peripheral areas to those in the closer vicinity of Sagalassos, we intended to explore

the nature and scope of the contacts between these areas, and to investigate the influence the city had on these outlying zones. These intensive surveys complemented the previous extensive surveys greatly, and provided a much more complex picture of human activity and occupation patterns in our study region through time.

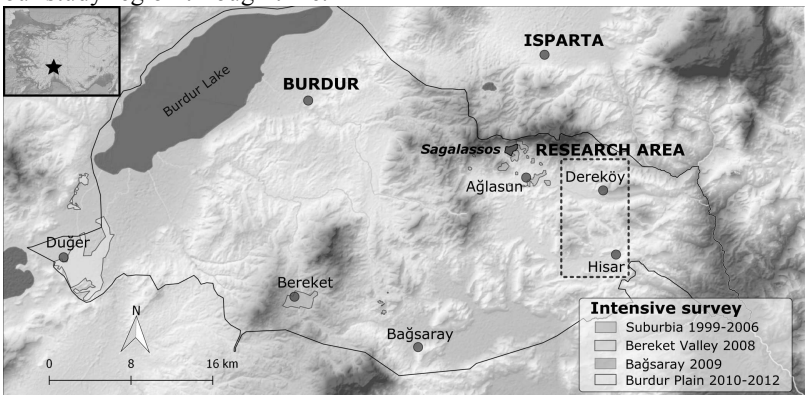

Figure 15-1. The territory of Sagalassos in the Roman Imperial period with the survey area located in the eastern part near the villages of Dereköy and Hisar. Previous intensive survey areas are also depicted.

In 2016 we resumed our survey research with a new intensive survey program in the mountainous areas near the villages of Dereköy and Hisar, about 7 km southeast of the archaeological site of Sagalassos. With this survey, we want to step away from the traditional research areas both within our region and in Anatolia in general. Up until now, research has primarily focused on the optimal occupation zones (e.g. Burdur Plain) with a high agricultural output potential and sufficient fresh water access. Logically, such areas revealed numerous obtrusive mound sites from the Neolithic onwards (Vanhaverbeke and Waelkens 2003; Vandam forthcoming). The ecology and geography of Anatolia, however, are much more diverse, and many landscapes such as highlands, mountains, wetlands, and so on remain largely underexplored. For SW Anatolia, we can state that large parts of it are even dominated by uplands, especially considering the presence of the western extent of the Taurus Mountains. In contrast to the lowlands, these areas are typically labelled as "marginal," but without systematic archaeological data we cannot asses to what extent they were truly marginal for ancient communities. The limited research on this topic from other regions of Turkey (e.g. Varinlioğlu 2007), however, illustrates that these areas can be integrated into the larger cultural landscape, but in general we know little about ways of doing things "on

the margin." Our Dereköy-Hisar survey, presented here, attempts to address this issue.

The new intensive survey program aims to document all human activity in more remote and marginal areas of the study region. By doing so we want to investigate when and how communities operated in these landscapes in terms of subsistence, mobility, and resource exploitation. Furthermore, we want to analyze the similarities and differences in the attested patterns when compared to the lowland communities and the regional poles of attraction, such as the ancient town of Sagalassos and its successor settlement at Ağlasun. How were these areas integrated into the larger socioeconomic system, and how may this have changed through time? By focusing our research on new unexplored landscape units, we want to test to what extent our current patterns in occupation history in the region hold up. For instance, is the Neolithic only characterized by clustered farming communities in plains areas? For periods missing or poorly represented in the lowlands, can we instead identify settlements in the highlands? In this paper, we present and discuss our initial survey outcomes from the Dereköy-Hisar region.

Research Area Background

The Dereköy-Hisar region (Fig. 15-1 and 15-2) is situated within the western Taurus Mountain Range and is characterized by hills (up to 1600 m asl) with dense vegetation of *Quercus coccifera* and *Juniperus* shrubs, and long, narrow valleys (1000 m asl). The hills themselves are today chiefly exploited by shepherds, while parts of the valleys and the low to moderate slopes are under cultivation by farmers, especially in the vicinity of the modern villages. The area was carefully selected as a research zone because it contrasts greatly with the large fertile intermountain plain areas within our region (e.g. Burdur Plain and Çeltikçi Plain). From an ecological and environmental point of view we can state that the Dereköy-Hisar area is agriculturally less productive, with more erosion, thin soil cover, and more limited permanent fresh water sources. On the other hand, it is much richer in other resources, such as forests, grazing land, chert and limestone outcrops, hematite deposits, and more. The more severe erosion in the area, however, can affect the outcomes of our fieldwork, resulting in the displacement of archaeological material. However, it can also expose earlier and buried contexts. Considering the geography, it is noteworthy that the hilly landscapes with hard to reach areas make the Dereköy-Hisar region more isolated and inaccessible as well. Another factor that played a role in determining our survey area was that it had not previously been

systematically investigated and had few known archaeological sites. As Vanhaverbeke and colleagues (2008) observed from previous extensive survey data, there is, for instance, a lack of the typical prehistoric mound (höyük) type sites that can regularly be found in the plains areas (e.g. Hacılar and Kuruçay Höyük). The known sites in our area (Fig. 15-2), located during our project's prior extensive survey campaigns (Vanhaverbeke and Waelkens 2003, Waelkens 1995, Waelkens et al. 1997), can be dated to various periods: a Late Palaeolithic cave site at Dereköy (excavated in 1997; Vermeersch et al. 2000), two larger hilltop sites at Hisar (Hellenistic and Roman) and Aykırıkça (pre-Hellenistic), a Late Roman/Early Byzantine hamlet (Ağlasun Erek Mevkii–Köy 1), and a church in the Ağlasun valley (Düldülizi), plus a few metal production sites in the Bey Dağları highlands, which were found during a geological survey.

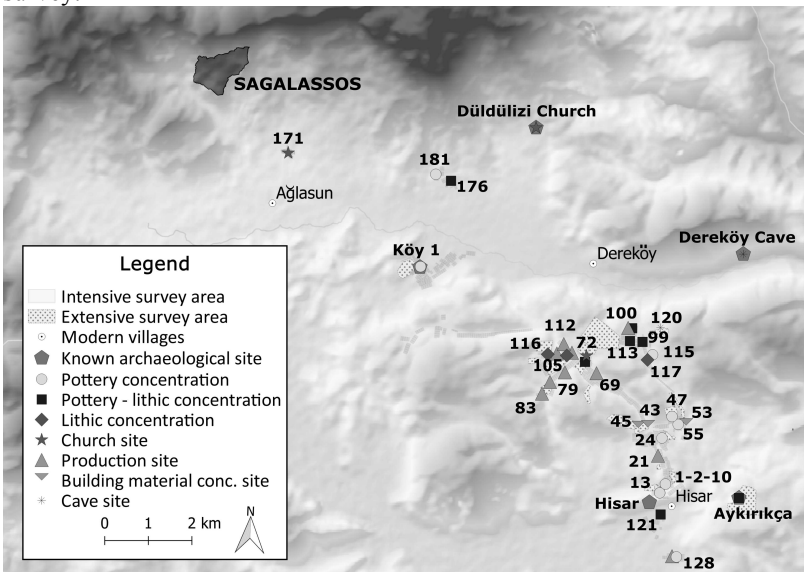

Figure 15-2. Overview of the surveyed area in the Dereköy-Hisar region with all the sites identified.

Over the years, the Sagalassos Project has established a set of well-dated palynological records for the study region (Bakker et al. 2011; Kaniewski et al. 2007; Vermoere 2004; Vermoere et al. 2002), but most of the collected cores did not have preserved oxidized pollen. Only in the more marginal locations did we succeed in acquiring preserved pollen. These palynological records indicate that vegetation distributions currently

observable in the study region developed only recently, and that there was considerable variability throughout the epoch and between different areas within the region. During the Neolithic period (8000–6000 BCE), very high levels of deciduous oak (*Quercus coccifera*) and the presence of *Pistacia* woodlands suggest that there was abundant moisture availability even on the high slopes, while *Pinus* pollen is also quite prevalent. High levels of Poaceae and wetland species in the low-lying valleys are also indicative of wet conditions, although the presence of springs and generous deciduous woodland cover may also be a contributing factor (Bakker et al. 2012). During the following Chalcolithic and Bronze Ages (6000–1000 BCE) *Pinus* species continued to thrive, while there were drastic reductions in deciduous oak and *Pistacia* concurrent with a rise in Cerealia-type pollens and secondary anthropogenic indicators (Vermoere 2004). Wetland species such as Cyperaceae, *Sparganium*, and *Typha* were greatly reduced or entirely absent in the samples. This, and corroborating evidence from the sedimentological record (Bakker et al. 2012), indicate the shrinking of wetlands, particularly between 4000–2500 BCE in the Ağlasun Valley. Anthropogenic indicators increased further between the Late Iron Age and the end of the Beyşehir Occupation Phase period (800 BCE–300/650 CE; the different coring sites have different dates for the end of the BO-Phase), including even greater amounts of Cerealia and also some cultivated tree species such as *Olea europaea*. Increases in deciduous oak and a high sedimentation rate indicate a return to wetter conditions, despite local deforestation and increased fire activity resulting in the establishment of shrub-steppe vegetation. Beginning between 300/650–1000 CE, sharp reductions in anthropogenic indicators such as *Olea* and Cerealia species can be observed. *Pinus*-dominated woodlands spread widely, while riparian woodland species established themselves in the Bereket Valley. From the Late Ottoman period and leading into the modern era, *Juniperus*-dominated woodland and shrub-steppe vegetation became widespread, especially during the nineteenth century CE.

Survey Methodology

To investigate the diverse nature of past human activity, including small and less visible sites, the survey methodology had to be systematic and intensive in nature. We decided to implement a site-less survey methodology (Bintliff 2000; Caraher et al. 2006; Dunnell and Dancey 1983) whereby the surface was approached as a continuous record of artefacts at varying densities. Through a total collection strategy (only tile fragments were counted) and the subsequent material study, spatial

patterns in artefact distribution were documented. Site boundaries were determined by the artefact fall-off patterns. Since we were dealing with varying topographies and visibilities, we had to integrate different methods into our survey design, to which we could switch according to the situation. The recent Cide Survey in northern Anatolia (Düring and Glatz 2015), which dealt with comparable survey challenges, applied a similar survey strategy, which we used as a model for our methodology. However, due to the fact that most of the Dereköy-Hisar region provided a surprisingly good visibility, we were able to continue our successful intensive tract-walking survey method from our previous research on the Burdur Plain (Kaptijn 2009; Vandam 2015). Furthermore, the fact that we could use similar methods facilitates the contextualization of the new results. Therefore, our team (a maximum of six field walkers) surveyed transects of 1 m wide, which were spaced apart every 20 m across the available ground in the landscape (Fig. 15-3a). The basic unit of collection was the "field," which often corresponded to an agricultural field. The archaeological finds for each 50 m segment of the surveyed transects were bagged together, referred to as plots. By doing so, we can track changes in artefact densities in sufficient detail while covering enough terrain each day.

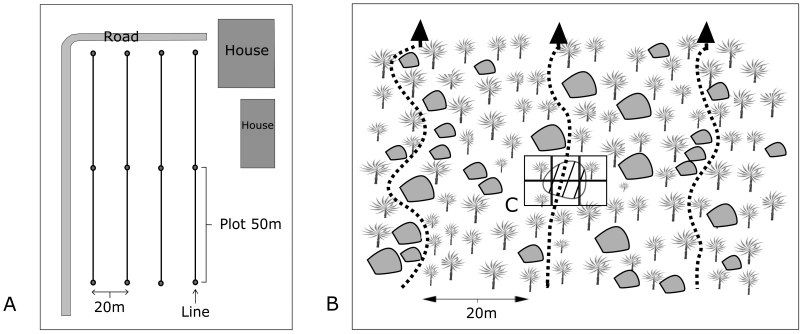

Figure 15-3. Applied survey methodology in the 2016 survey campaign. In addition to our tract walking surveying method (a) we implemented an undulating transect walking (b) and gridded survey (c) in areas with less visibility.

For landscape units with little visibility and a difficult terrain, such as uncultivated fallow land and steep hillslopes, we designed a two-staged survey methodology to ensure the intensive exploration of these areas. The first stage survey consisted of a modified version of our systematic tract walking survey: undulating transects (Banning 2002: 91-92; Düring and

Glatz 2015: 77). The surveyors were still spaced at intervals of about 20 m, but they walked in less strictly linear transects that allowed them to move towards areas of better visibility and to circumvent obstacles in the landscape (Fig. 15-3b). If artefact concentrations were identified, we organized a second stage gridded survey to acquire detailed information about the concentrations (Fig. 15-3c). In these cases, grids of 10 × 10 or 5 × 5 m were laid out, within which the surveyors could collect all the material and count the tiles within a 3-minute time period.

Sampling of all landscape units present in the Dereköy-Hisar area was attempted: valleys, uplands, hill spurs, hills, and isolated plateaus. In addition, based on our ongoing results in the field, we selected new zones during the campaign and explored locations that were made known to us by local shepherds. In a few cases the archaeological survey was complemented by geophysicists to gain extra insight into the newly discovered sites, but these results will not be discussed in this article due to limitations of length. The survey campaign lasted for seven weeks and consisted of both field walking and material study.

Survey Results and Discussion

During the 2016 campaign the archaeological survey team was able to investigate a total of 185 fields (Fig. 15-2) in the Dereköy-Hisar research area. This corresponded with an area of 2.73 km^2 in which we discovered 27 new artefact concentrations, from various time periods and of different natures. A few of these clusters, however, could potentially be merged with one another, which would bring the total to 24. In numbers this translates to 8601 collected sherds, 3815 counted tiles, and 534 collected lithics. In comparison with our previous intensive survey campaigns in the Burdur Plain, where, as mentioned, we applied a similar survey method but had small variations in the duration of the survey and number of team members, these are high numbers for all material categories. The three seasons in the Burdur Plain, for instance, yielded only 10,535 sherds. This outcome might partly be the result of the different rates of sedimentation and erosion processes between both landscapes. The best represented periods in the 2016 survey were Late Roman-Early Byzantine, Byzantine Dark Ages, and most common by far was the Late Ottoman-Modern; however, concentrations dating to prehistory, the Iron Age, and Roman imperial centuries were also identified in the field. The general results of each attested time period will be discussed below.

Prehistory (120,000–2000 BCE)

Prior to our survey, the prehistory of the Burdur area was mainly known from small late prehistoric mound sites in the plains areas such as Hacılar (Mellaart 1970) and Kuruçay Höyük (Duru 1994, 1996) and short-lived flat Chalcolithic-Bronze Age settlements in their vicinity (Vandam 2015; Vandam et al. forthcoming). Earlier sites, however, are very rare. Two excavated sites possessed clear Upper Final/Epipalaeolithic artefacts: the Dereköy Cave (Vermeersch et al. 2000) and Baradız (located in the Isparta area, Kansu 1945). In addition, at an illegally excavated trench at the site of Sandal Asar (eastward of our survey area) lithics were encountered that could be dated to the Epipalaeolithic (Waelkens et al. 1997). However, it is worth mentioning that in the surroundings of our research area, near Dereköy, the earlier extensive survey (Vanhaverbeke et al. 2008; Waelkens et al. 1997) identified a small number of lithic artefacts (sometimes alongside handmade and wheelmade pottery), but their dating remains unsecured. A similar but larger lithic artefact concentration was also found during a geological survey (Vandam et al. 2013).

The 2016 survey results provide new insights into the Prehistoric period. Firstly, we encountered a very high number of lithic artefacts (Fig. 15-4a), which can be considered one of the most notable outcomes of the survey. Our 2016 survey provided more lithics (n=534) in one campaign than the three seasons in the Burdur Plain combined (n=417). In addition to many lithic stray finds, we identified nine open-air lithic artefact concentrations, of which Fields 100-113-99 may possibly be lumped together (Fig. 15-2 and Fig. 15-4). In particular, the 800 m long plateau within the so-called Bey Dağları massif, where the last mentioned site was located, provided the greatest number of lithics. Additionally, a resurvey of the known site of Aykırıkça (see below, Fig. 15-2) yielded a large cluster of lithics as well. Together with the previously investigated Dereköy Cave site, this brings the total number of known lithic concentrations in our research area to 11.

At the time of writing, the attested lithics are still under review. Preliminarily, we can conclude that these concentrations contain mixed materials from different phases within prehistory. The oldest artefacts identified by the survey date back to the late Middle Palaeolithic period (120,000–45,000 BCE), which make them the earliest documented archaeological finds within our region, and pushes far back the timeframe for the first human activities there. In Anatolia in general, more and more survey projects are encountering and reporting Middle Palaeolithic data

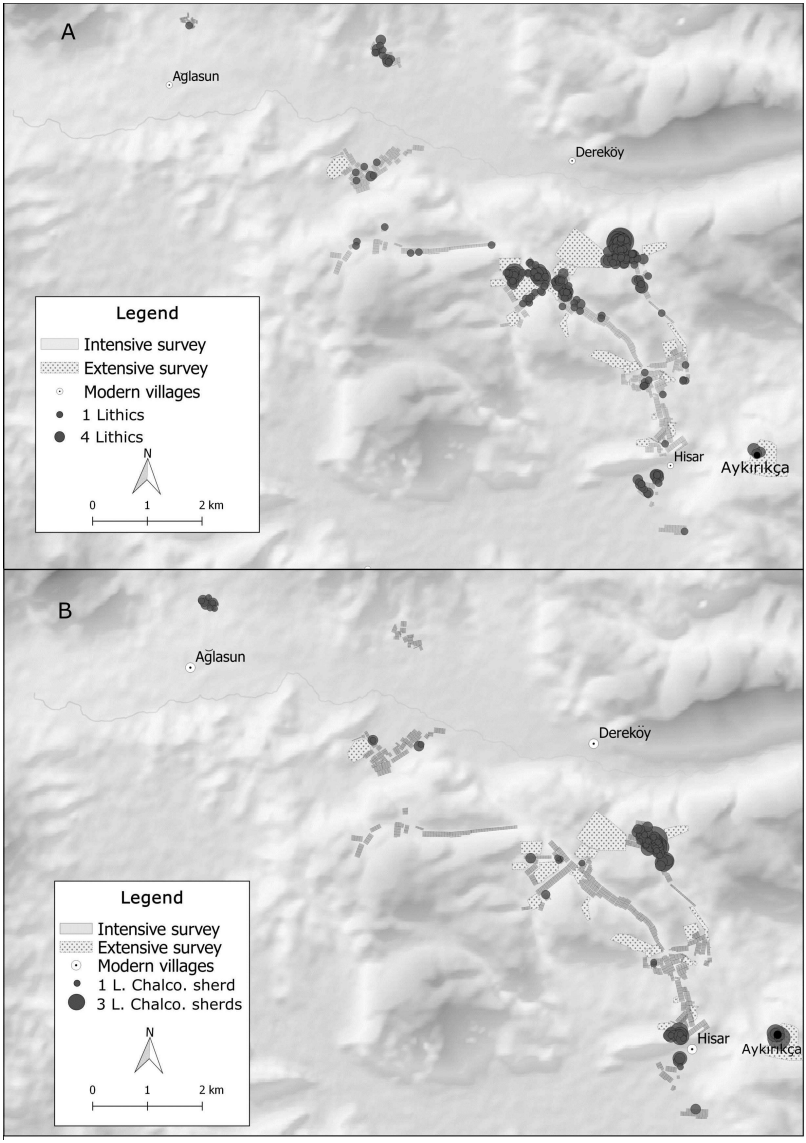

Figure 15-4. Artefact distribution maps.
a. The lithic artefacts; b. Late Chalcolithic pottery.

(Çilingiroğlu et al. 2016; Kuhn et al. 2015), which aids in our understanding of this poorly known period in Turkey, and sheds light on

broader research themes such as the dispersal of early hominids. In our survey, the Middle Palaeolithic period was not just represented by a few isolated finds within the landscape. In the area of Field 100-113-99, and with certainty Field 117 (Fig. 15-2 and 15-5), fairly dense concentrations of Middle Palaeolithic artefacts were discovered. The latter was located on a high plateau near a series of old karstic pipe outlets, but overall most other Middle Palaeolithic finds (including the stray finds) were found on higher ground. The positively identified Middle Palaeolithic material displayed typically Levallois reduction traits and consisted mostly of flakes. A Levallois core (Fig. 15-5) with radial preparation was documented as well, which potentially links with one of the recovered flakes. This most likely indicates that the artefacts were locally produced. The Middle Palaeolithic material consisted mainly of greenish and red-brown chert that was naturally occurring in the area. No obsidian Middle Palaeolithic artefacts were found. Notable about the Middle Palaeolithic artefacts from Field 117 was their fresh nature. In contrast to other finds from the period, they were not weathered from being exposed on the surface for a long period. This observation suggests that the local gully system at Field 117 has cut into underlying deposits and washed out the artefacts relatively recently. The exact stratigraphic position of the Middle Palaeolithic artefacts from Field 117 remains to be determined, and such a determination may not be possible. However, in terms of the amplitude and nature of its sedimentary fill, this field offers huge potential for the study of the Palaeolithic past of the Sagalassos region.

Figure 15-5. Field 117, where we have positively identified Palaeolithic artefacts, among which is a Levallois core.

In addition to the Middle Palaeolithic artefacts, the majority of the lithics could be dated to the Upper Final/Epipalaeolithic and possibly even to late prehistory (< 10,000 BCE), but more research is required to firmly

establish their chronology. Noteworthy is that several lithic concentrations cluster together to a certain extent with the Late Chalcolithic pottery (Fig. 15-4), but based on the typological traits it is clear that most of them date to the earlier periods noted above. These later lithic artefacts consisted mostly of unretouched flakes, but tools such as blades and scrapers were also identified. Some of them were categorized as microlithics. The lithics were mainly knapped from reddish or greenish chert and white milky quartz, but two obsidian flakes were also found in Field 100. In contrast to the Middle Palaeolithic artefacts, the younger lithic artefacts were found on top of the surface from which they seemed to have eroded.

Although our research on the dating and nature of the lithic concentrations is still ongoing, their discovery offers an excellent opportunity to shed light on the poorly understood prehistoric hunter-gatherer communities and their transition towards the Neolithic way of life in our study region. Considering the distribution of the lithics we can for now preliminarily conclude that they occur in the uplands and to a much lesser extent in the valleys. The different rates of sedimentation and erosion could possibly be part of the explanation for this. However, considering the availability of high quality resources in the Dereköy-Hisar highlands, such as chert outcrops and grazing land for game, these areas may have been particularly favorable to hunter-gather groups.

For late prehistory, our survey did not pick up any clear indications of Neolithic–Early Chalcolithic occupation in our research area. Palynological records from the study area dated to the Neolithic and Early Chalcolithic show very low levels of Cerealia pollen and other anthropogenic indicators, as well as an absence of any evidence of deforestation, plus indications of wet conditions at the nearby Ağlasun Valley (Bakker et al. 2012). This supports the lack of archaeological material recovered for these earlier periods, although these pollen data are often more useful at indicating the possible presence of agriculture than activities associated with pastoralism. Based on our current settlement data it seems that these communities concentrated themselves in the more optimal and well-watered areas of the region (Vandam, forthcoming). However, it is too soon to conclude that the highland landscapes were entirely avoided by early farmers as in close proximity to our survey area is the cave site, İnarası (Becks 2014), where Early Chalcolithic material has been discovered. During the Late Chalcolithic (4200–3000 BCE) an increase in human activity took place in the Dereköy-Hisar region. First, a restudying of the excavated Dereköy Cave material and a revisiting of the site of Aykırıkça (see below) revealed a significant number of Late Chalcolithic sherds. In addition, the survey picked up several small

concentrations of similar materials in different parts of the landscape, both in the valleys and in the uplands and plateaus (Fig. 15-4b). The Late Chalcolithic material was mostly found at later occupied Late Roman-Byzantine sites (e.g. Field 13-14, Field 99, and Field 171), indicating that these sites might have had prehistoric predecessors. Because they are obscured by later occupation, it is hard to estimate the dimensions of the Late Chalcolithic sites. Only at Field 99 and Aykırıkça can we confirm that we are dealing with a more substantial occupation, considering the amount of Late Chalcolithic material and the extent of their distribution (>1 ha).

The Chalcolithic pottery material is dark grey-reddish in color and occasionally slipped and burnished. Most of the examples are body sherds, but the limited number of collected diagnostic sherds, among which are the commonly found ledge handles of storage jars, illustrate forms that bear resemblance to a certain extent to the Kuruçay material of Level 6 (Duru 1996: 25-46), which can be dated to around 3500 BCE. A more specific dating than general Late Chalcolithic for this survey material cannot be put forward due to the low number of feature sherds and the observed differences with the other known 3500 BCE Chalcolithic sites in the area, such as the application of dark slip and occurrence of different fabrics.

These new results illustrate a spike in human activity in the Late Chalcolithic in our research area, which fits well with our current understanding of this period. During the Late Chalcolithic we noticed (e.g. Burdur Plain) an increase in the population in the lowlands with high settlement numbers and the exploration of new areas (Vandam et al., forthcoming). Also, in Western Anatolia, Late Chalcolithic communities expanded their economies and their footprints in the landscape (Düring 2011; Schoop 2014). However, if we take our palynological data into account we can observe that during the Middle Chalcolithic a drastic reduction in deciduous oak and *Pistacia* occurred, indicating severe deforestation which peaked between 5300–4300 BCE; this was followed by a spike in Cerealia and secondary anthropogenic indicator species such as *P. lanceolata*, *Polygonum aviculare*, and *Polygonum cognatum* (see above). This would suggest an increase in human activity in the area just before the start of the Late Chalcolithic, which we are currently missing for whatever reason (e.g. recognition or visibility problems). In addition to the more local drying conditions between 4000–2500 BCE, other records in the region also point to colder and dryer climatic conditions starting during the 5th and 4th millennia BCE (Eastwood et al. 2007; Roberts et al.

2001), which may have played a role in the expansion of late prehistoric communities into the survey area and the wider region.

Late Iron Age (800–546 BCE)

Although there is abundant evidence of (Early) Bronze Age occupation in our study area (e.g. Hacılar Büyük Höyük in the Burdur Plain; Umurtak and Duru 2016), it is only from circa 800 BCE onwards that we again pick up traces of human presence in the Dereköy-Hisar region (Fig. 15-2). On the high plateau of Field 99 we discovered a small concentration of Late Iron Age or Archaic sherds (Fig 15-2). A much larger and isolated Iron Age artefact scatter was identified at the ancient hilltop site of Aykırıkça (Fig. 15-2 and 15-6). The site was already known to our project through previous extensive surveys (Waelkens et al. 1997: 36-37), but was reinvestigated during the 2016 survey campaign to secure its chronology and to contextualize the newly found survey materials. From this, it became clear that Aykırıkça is a multi-period site with predominantly Epipalaeolithic, Late Chalcolithic, and Iron Age materials. The latter was characterized by coarse open bowl forms (rim diameter up to 3-50 cm), but also storage jar and jug fragments were identified. Furthermore, several loom weights, which we believe are linked to this period, were collected.

Nowadays the entire plateau of Aykırıkça is completely covered with dense *kermes oak* shrubs, resulting in very low visibility. Therefore, only three open spaces at the site could be intensively surveyed. Archaeological materials, however, were found over an area of approximately 400 × 300 m, roughly in between the western edge of the cliff and the steep ridge of the hill in the east. Its setting clearly provided a natural defense for the site. Fresh water was presumably available through a small stream southwest of the plateau. Iron Age hilltop sites similar to Aykırıkça are known in the more western parts of the Sagalassos area (e.g. Kökez Kale and Hisar Kale; Vanhaverbeke et al. 2011), but with our survey we were able to establish this pattern in the eastern part as well. Overall the Iron Age period is particularly well represented in the archaeological record; situated next to the hilltop sites, numerous farmsteads (< 1 ha) and villages (> 1–4 ha) in the lowlands such as the Burdur Plain (Kaptijn et al. 2012) have been identified. Also noteworthy is the salvage excavation of the open-air Iron Age sanctuary (Kahya and Ekinci 2015) on the peninsula at Lake Yarışlı in Düğer, just westward of the ancient Sagalassos territory. It has been argued that the Iron Age hilltop sites each controlled a single valley (and farmsteads?) (Vanhaverbeke et al. 2011). If this is the case,

Aykırıkça would then control the Yumrutaş Valley rather than the Hisar Plain, as the valley is much more accessible from the site. More research needs to be carried out to confirm this hypothesis, allowing for different pathways to complexity as well as considering the wider effects of increased Mediterranean connectivity in this period (Poblome et al. 2013). The increase in human activity during this period is also notable in the collected pollen records (see above).

Figure 15-6. Circular structure/burial no. 8 at Aykırıkça. Attested painted pottery that was found in the debris of illegal excavations at burial no. 2.

Based on the nature of the identified surface materials, we can conclude that Aykırıkça was a settlement, but we also encountered 16 semi-circular fieldstone structures (Fig. 15-6, top). Since the site was poorly accessible and had low surface visibility, it is possible that there is an even greater number. The dimensions of these limestone heaps varied between 12-15 m in diameter; they were about 1 m in height. Although the presence of these structures was already known (Waelkens et al. 1997: 37) we discovered that four of them were recently illegally excavated; a study of Google Earth images revealed that the illegal excavations happened within the last three years. In the debris of those trenches we found fragments of burned human bone (cremation?) and pieces of metal artefacts and ceramics. The attested pottery could be identified as locally made painted Archaic ceramics with geometric patterns (Fig. 15-6, bottom). Based on these finds and the fact that we are dealing with round prominent structures, a case can be made for interpreting these as Iron Age burials or tumuli as was previously hypothesized in the literature (Waelkens et al. 1997: 37). Also at Hisar Kale similar round structures were observed. The reinvestigation of Aykırıkça provides us with an opportunity to study the poorly understood socioeconomic dynamics during the Archaic period. Therefore, we hope to continue our study of this site in the future, especially with the ongoing threat of illegal excavations.

Roman–Byzantine Dark Ages (25 BCE–900 CE)

In the other intensively surveyed areas of the Sagalassos study region, continuation between the Late Iron Age and Achaemenid to Hellenistic (550–25 BCE) periods can be observed. This was not the case for our survey area. The two Iron Age sites do not seem to have had an Achaemenid or Hellenistic successor phase, and this period was particularly poorly represented in our survey. Only the previously known hilltop site of Hisar (De Laet et al. 2007; Waelkens 1995) and the fields on its foothills (Field 13–14) provided some Hellenistic remains. At the other end of the Ağlasun Valley, the sites of Düzen Tepe and Sagalassos originated in late Achaemenid times, representing new concentrations of farming populations (Daems and Poblome 2016). Similarly, little evidence for the Roman imperial period (25 BCE–300 CE) was found (n=176 sherds) in our survey (Fig. 15-7a). The occupation at Hisar and its surrounding fields (Field 1-2-10 and Field 13-14) continued and grew in size (2.7 ha), which makes it the only substantial site from the period

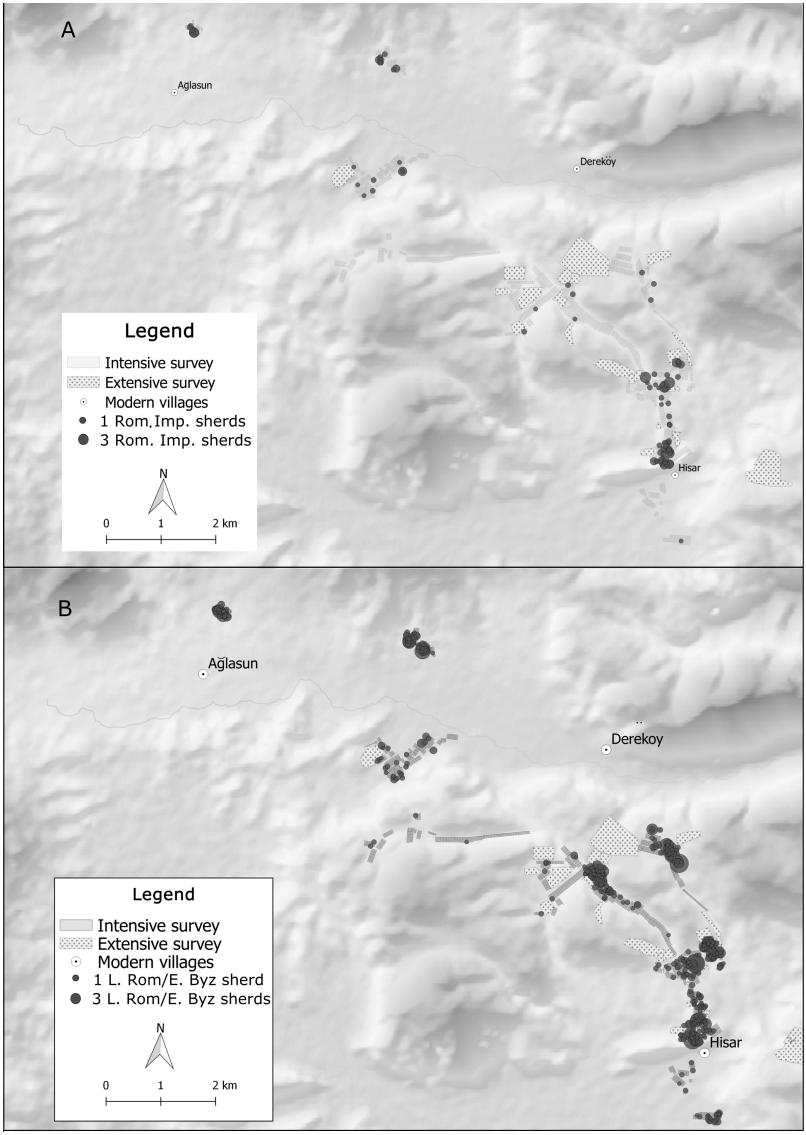

Figure 15-7. Artefact distribution maps.
a. The Roman imperial pottery; b. Late Roman–Early Byzantine pottery.

identified in the survey area. In addition, two small Roman imperial artefact scatters were documented at Field 47 and Field 181 (0.5 ha) which

can be interpreted as farmsteads. At other locations (around Field 24 and 171) the Roman imperial pottery was mostly very weathered and possibly brought to these locations in association with manuring activities, a phenomenon that has been observed in different regions in the Eastern Mediterranean (e.g. Bintliff and Snodgrass 1988).

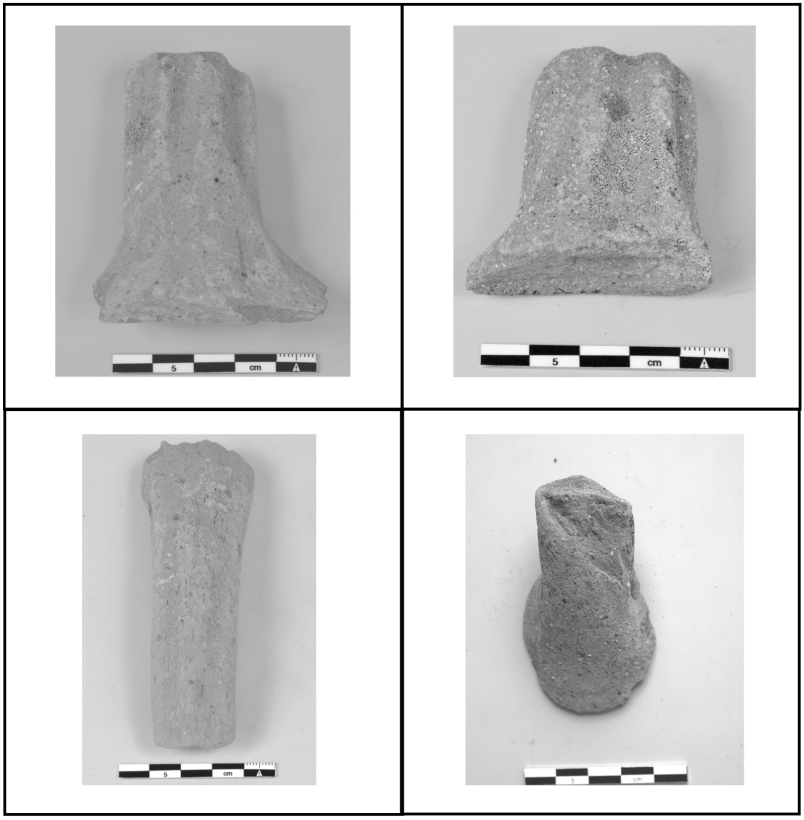

Figure 15-8. Examples of Late Roman amphora handles found at the different settlements. Clockwise from left to right: Field 13, Field 24, Field 47, Field 115.

A distinct settlement influx to the Dereköy-Hisar landscape can be noticed beginning in the Late Roman period (300–500 CE), which remained constant until the end of the Byzantine Dark Age (700–900 CE) (Fig. 15-7b). About 16 sites can be dated to the Late Roman/Early Byzantine centuries in our survey area. They were attested across various parts of the landscape, and their diverse nature is quite noteworthy. Most of the identified artefact scatters could be interpreted as small to medium

sized farming villages (0.6–2 ha; Field 99, 115, 128, 176, 181 and the known site: Ağlasun Erek Mevkii–Köy 1), but more substantial settlements (4–6 ha) at Hisar and at its foothills (Field 1-2-10 and Field 13-14), and Field 47-55 were also identified. The small extent of Field 24 (0.3 ha) likely suggests that a single farmstead existed at this location. The presence of amphora handles, made from local clays (Fig. 15-8) at these different settlements and even a press counter weight (for olive or grapes/wine) suggested a degree of specialization in agricultural production. In addition to these settlements, a single aisled church[1] was found at Field 72. The church, with parts of the walls of the apse, narthex, and nave preserved, was located on a hill slope on a high plateau. The wide artefact scatter (4 ha) around it indicated that it was not a stand-alone feature. At several locations in the highlands we also identified metal production sites (Field 69 and 79) that could be linked to the period under consideration. The small scale of these sites, however, suggested that they were used only for local purposes. Lastly, a cave site with Greek inscription (Field 120) and a few small-scale building material concentrations (Field 43, 45, and 53) at strategic locations on hillslopes or at valley entrances, were encountered. The exact nature of these last-mentioned sites currently remains unclear. The variety of the different sites in turn demonstrates the diversity of activities that took place in the Dereköy-Hisar area.

Despite the continuity of many Late Roman/Early Byzantine settlements into the Byzantine Dark Ages, we noticed a degree of nucleation in the artefact distributions during the latter. In comparison, fewer Byzantine Dark Age stray finds were discovered, and the sites themselves seemed to shrink in size. Only the settlements at Field 128 and 176 (Fig. 15-2) increased in size. Despite this pattern, the total number of collected sherds differed only a little.[2] Next to the settlements, the church at Field 72 remains in use, and a new one seem to have been erected in the Ağlasun valley (Talloen et al. 2017).

The developments in the Dereköy-Hisar landscape during the Roman and Byzantine periods are interesting and can be further contextualized. The small number of Roman imperial settlements fits with our current understanding of this period in the Ağlasun Valley, where we mainly see

[1]The dimensions of the church can be estimated at 16.40 m in length (including a narthex of 3.90 m) and 5.60 m wide.

[2] Late Roman/Early Byzantine n=1072 and Byzantine Dark Age n=916.

clusters of small farmsteads in close vicinity to Sagalassos (Vanhaverbeke et al. 2009), on which we believe they were dependent as the main central market. In Late Antiquity, a major socioeconomic reconversion resulted in a reorganization of the settlement system. Increasing rural population totals in the wider Sagalassos hinterland were buffered by decreasing external market dependencies and a developing specialized agricultural and artisanal productive landscape (Poblome 2014). In this light, the frequently attested local amphora fragments at the various identified sites are good examples (Fig. 15-8). The Ağlasun cores back up this hypothesis, as grape vine (Vitis finifera) pollen not only occur during the Roman-Byzantine period but also spike around the Late Roman period (Vermoere 2004). It seems that even the less productive areas of our survey region were incorporated in this new strategy. In sum, the new survey results illustrated well the resilience and adaptive character of communities through continuity and change associated with the later Roman and Byzantine sites. Considering the pollen data, however, the largest human impact is noticeable in the Roman Imperial period and earlier, while anthropogenic indicators decline across most of the cores during the Late Roman and Early Byzantine period.

Late Ottoman–Modern (1700–1920 CE)

The last epoch from which sites were encountered is the Late Ottoman period (1700 CE onwards). The entire extent of the Dereköy-Hisar survey area seems to be littered with pottery from this period; more than half of the dated sherds were attributed to these periods. At most of the identified sites from earlier periods, there were Late Ottoman materials observed as well. In most cases the occupation was probably limited to one or a few households. In the case of Field 121, southwest of the modern village of Hisar, we have good indications that we are dealing with a more extensive village-type settlement. In contrast to our other survey outcomes, we noticed an especially high number of off-site densities for this period. This is probably the result of a different economic strategy during this period, with a stronger focus on pastoral activities. Related to these activities were the different stone-built cisterns that were documented in the Hisar-Dereköy landscape (Fig. 15-9). Some of the cisterns were still in use, but their construction and the occurrence of Ottoman jug fragments in close proximity to these structures suggested that they dated back to the Late Ottoman period.

Figure 15-9. A Late Ottoman cistern, which is currently still in use, has been found southward of Field 128 in the Hisar plain.

Conclusion and Future Work

The 2016 Sagalassos Survey in the Dereköy-Hisar area produced an extensive amount of new information on the settlement patterns and human activities of communities that operated in more "marginal" landscapes during the past. Our results demonstrate that these areas have great archaeological potential and were integrated within ancient cultural landscapes. Therefore, we can question as to what extent these landscapes were truly marginal, and whether they were considered as such in ancient times. From early periods onwards, we have evidence that these areas were actively used. In comparison with the lowlands, we can conclude that the archaeological remains are often different in nature and in date. Periods that we are currently missing in the lowlands, like the Palaeolithic hunter-gatherer groups for instance, are represented in the archaeological record of the highlands. The presence of many production sites also illustrates this point. One of the primary explanations for this may be the number and variety of high-quality resources in these areas; be it forestry products, grazing land, or chert outcroppings. From the survey, it became clear that human presence in these areas was not continuous. Our results currently demonstrate the connectivity of these landscapes with the lowlands, as we have evidence that at various points in time, upland areas

served as expansion zones of sorts. We documented an increase in sites during periods of general population increase and economic specialization, as during the Late Roman-Byzantine period for example.

In the upcoming campaign, we plan to continue with our survey research in the Dereköy-Hisar region. First, we intend to extend our sample area and to test to what extent our first results hold up in exploring new areas. Secondly, we hope to examine the nature of the identified sites in more detail by continuing our geophysical survey research. Finally, we aim to start up a pottery production characterization at the identified settlements and initiate spatial analysis on the discovered site patterns.

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